

后芮驷(上海)电子有限公司

Horus International Electronics Co., LTD.

承认书

SPECIFICATION FOR APPROVAL

编号:

品名 DESCRIPTION: SMD Type Common Mode Choke Coil

规格 SPEC : HRS-RCA-C7060-701M

包装 PACKAGE: 卷装

客户 CUSTOMER: _____

客户料号 CUSTOMER P/N: _____

APPROVED BY

CUSTOMER



HORUS



DATA SHEET

SMD Type Common Mode Choke Coil

P/N: RCA- C7060-701M

Moisture Sensitivity Level: 1

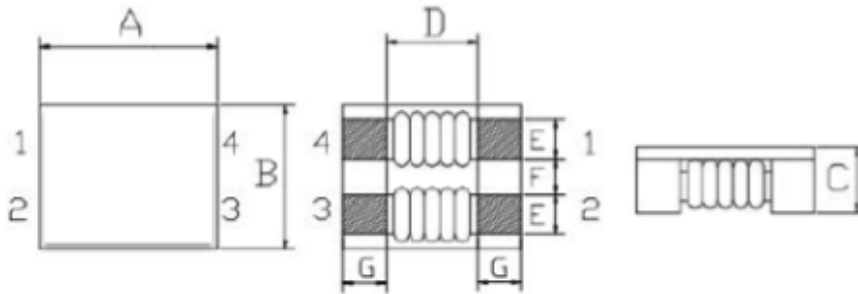
RoHS compliance.

Halogen Free available.

Qualification to AEC-Q200.

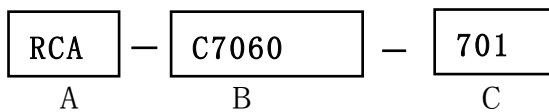


1. Paching Dimensions (mm)



A	7.0±0.5
B	6.0±0.5
C	3.8 Max
D	3.5 REF
E	1.5±0.2
F	1.5±0.2
G	1.7±0.2

2. Part Number

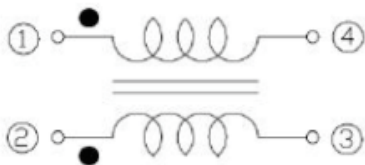


- A: Series (RCA: For Automotive Electronics)
 B: Dimension A x B
 C: Impedance min 701=700Ω (500ΩMin)
 D: M = Min

3. ELECTRICAL CHARACTERISTICS:

- 4.1 測試條件 (Test conditions): 25° C, 65%RH@ 100MHz/0.1V
 阻抗 (Impedance): $Z(1-4/2-3) = 700\Omega$ TYP (500Min)
 額定電壓 (Rated Voltage) = 125V Max
 額定電流 (Rated Current) := 4.0A Max
 直流電阻 (DCR) (1-2/3-4) := 15mΩ Max

- 4.2 測試儀器 (Test instruments): Z:CH1310/CH3252



Note:

Operating temperature : -40 to +125°C

Typical Heat Rating DC Current would cause an approximately ΔT of 40°C

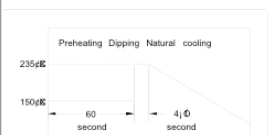
If Use Wave soldering is there will be some risk. Re-flow soldering temperatures below 240

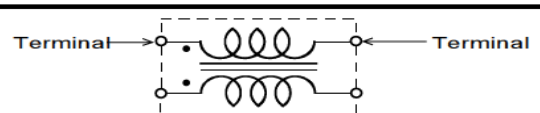
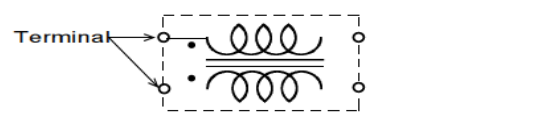
Degrees, there will be unwitting risk

Solder standard according to IPC-A-610D 8.2.1 Chip Components - Bottom Only Terminations



4. Reliability and Test Condition

Item	Performance	Test Condition
Operating Temperature	-40 ~125 °C (Including self-temperature rise)	
Electrical Performance Test		
Inductance L	Refer to standard electrical characteristic list	Agilent-4291, Agilent-4287 Agilent-4192, Agilent-4285
Q		
SRF		Agilent-4291
DC Resistance		Agilent-4338
Rated Current	Base on temp. rise & $\Delta L/L0A \leq 30\%$.	Saturation DC Current (Isat) will cause L0 to drop approximately $\Delta L(\%)$.
Temperature Rise Test	ΔT 40 Max	Heat Rated Current (Irms) Will cause the coil temperature rise approximately $\Delta T(^{\circ}C)$ without core loss. 1. Applied the allowed DC current. 2. Temperature measured by digital surface thermometer
Mechanical Performance Test		
Resistance to Soldering Heat MIL-STD-202 METHOD 210	1. Inductors shall be no evidence of electrical and mechanical damage. 2. Inductance : within $\pm 10\%$ of initial value	Temp.: 260 \pm 5°C Time: 10 \pm 1.0 Sec
Solderability Test ANSI/J-STD-002	More than 95% of terminal electrode should be covered with solder.	 <p>After fluxing, component shall be dipped in a melted solder bath at 235\pm5°C for 4\pm1 seconds.</p>

No.	Item	Terminal to be Tested
1	Impedance (Z) (Measurement Terminal)	
2	DC Resistance (Rdc) (Measurement Terminal)	
3	Insulation Resistance (I.R.) (Measurement Terminal)	
4	Withstanding Voltage (Measurement Terminal)	
5	Humidity Load (Supply Terminal)	
6	Heat Life (Supply Terminal)	



5. Soldering and Mounting

1. Soldering

Mildly activated rosin fluxes are preferred. terminations are suitable for all wave and re-flow soldering systems. If hand soldering cannot be avoided, the preferred technique is the utilization of hot air soldering tools.

1.1 Solder re-flow:

Recommended temperature profiles for re-flow soldering in Figure 1.

1.2 Soldering Iron(Figure 2):

Products attachment with a soldering iron is discouraged due to the inherent process control limitations. In the event that a soldering iron must be employed the following precautions are recommended.

- Preheat circuit and products to 150°C
- Never contact the ceramic with the Iron tip
- Use a 20 watt soldering Iron with tip diameter of 1.0mm
- 355°C tip temperature (max)
- 1.0mm tip diameter (max)
- Limit soldering time to 4~5 sec.

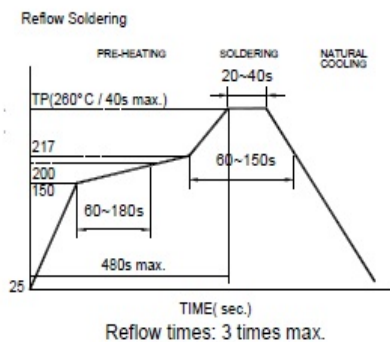


Fig.1

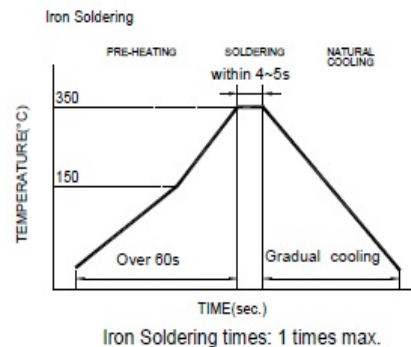
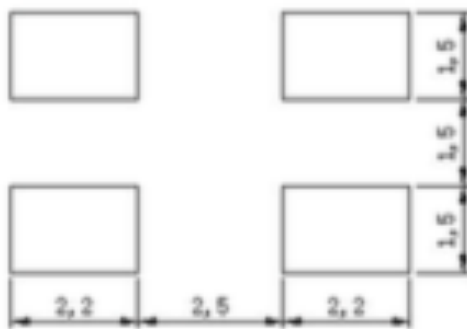


Fig.2

Recommended PC Board Pattern



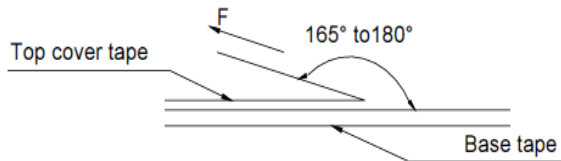


6. Packaging Information

Packaging Quantity: 1500 pcs/Reel

Reel Dimension:

Tearing Off Force



The force for tearing off cover tape is 15 to 80 grams in the arrow direction under the following conditions.

Room Temp. (°C)	Room Humidity (%)	Room atm (hPa)	Tearing Speed mm/min
5~35	45~85	860~1060	300

Application Notice

• Storage Conditions

To maintain the solderability of terminal electrodes:

1. products meet IPC/JEDEC J-STD-020D standard-MSL, level 1.
2. Temperature and humidity conditions: Less than 40°C and 60% RH.
3. Recommended products should be used within 12 months form the time of delivery.
4. The packaging material should be kept where no chlorine or sulfur exists in the air.

• Transportation

1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
3. Bulk handling should ensure that abrasion and mechanical shock are minimized.

Modify records

Version	Page	Description
V01	N/A	New issued